

## COMBINED IN-CIRCUIT EMULATOR AND PROGRAMMER

### ABSTRACT OF THE DISCLOSURE

A combined in-circuit emulation system and device programmer. A pod assembly used in an in-circuit emulation system has both a real microcontroller used in the In-Circuit Emulation and debugging process as well as a socket that accommodates a microcontroller to be programmed (a program microcontroller). Programming can be carried out over a single interface that is shared between the microcontroller and the program microcontroller and which is also used to provide communication between the real microcontroller and the In-Circuit Emulation system to carry out emulation functions. In order to assure that the emulation microcontroller does not interfere with the programming process for a microcontroller placed in a programming socket, a special sleep mode is implemented in the emulation microcontroller. This sleep mode is activated by a process that takes place at power on in which the a reset line is released with a specified data line held in a logic high state.